

## **902 CHAIN LINK FENCE**

Fences should go up as soon as possible. Although fences may restrict the Contractor's access to parts of the site, they do protect the public from the safety hazards associated with highway construction (refer to Subsection 107.08). Permanent fencing is preferred over temporary fencing since permanent fencing is usually more secure and no rental payments are involved.

Fence lines are to be staked so that the fence posts are 6" from the right-of-way line, unless otherwise shown on the plans.

When building a new fence requires removal of an existing fence or erection of temporary fences, the Inspector and the Contractor are to work with the property owner to accomplish the changes with the least disruption and inconvenience.

### **902-2 Materials**

Two materials options are permitted for fence material: zinc-coated (galvanized) steel or aluminum coated steel. However, only one kind of material will be allowed on each project. This material requirement is due to the corrosive reaction caused by interaction of dissimilar metals.

Zinc-coated metals have a dull to very dull (almost greenish) appearance when the zinc coating has the proper thickness. A shiny surface is good indicator that the coating may be too thin. If this is the case, take a sample before the material is installed and have the sample sent to the Structural Material Testing Section of the Materials Group for a coating thickness check.

### **902-3 Construction Requirements**

When chain link fence is installed over irregular ground, it may be necessary to do a considerable amount of grading along the fence line to obtain the uniform bottom-of-fence line clearance specified in the standard drawings.

Rock or hard ground makes installation of fence posts difficult, hindering either the post driving or hole excavation. It may be necessary to increase inspection to assure that posts are anchored to the proper depth and diameter.

When Class B or utility concrete is used to anchor fence posts, the Contractor will have to wait several days before stretching the fence fabric. The concrete needs to develop adequate strength and stiffness to resist the bending forces developed in the posts when the fence fabric is stretched and tensioned. If the Contractor is in a hurry and with the approval of the Resident Engineer, Class S concrete with high early strength cement can be used which may allow fabric stretching and tensioning the day following fence post installation.

#### **Guidelines For Inspecting Chain Link Fence:**

1. Do the materials conform to the plans and specifications, and are materials certifications available for those items requiring them?
2. Are posts spaced at 10 feet (3 meters) or less intervals? (refer to Standard Drawing C-12.20)
3. Is wire fabric of proper gauge?

4. Is the wire fabric installed so that the "knuckled" selvage is on top and barbed finish is on the bottom?
5. Has the concrete cured 72 hours before the fabric is stretched? (Unless high-early strength concrete was used.)
6. Is the fabric stretched taut and securely fastened to the posts and strain wires?
7. Is tie wire of proper gauge?
8. Are wire clips of proper gauge?
9. Are the strain wires of proper gauge?

Fence materials that are thicker or have thicker coatings than required are usually acceptable to the Department. Unless there is an appearance problem with the fence, the Resident Engineer can approve the thicker materials by a no-cost minor alteration.